

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of claims in the application.

1. (Currently amended) A method ~~for reducing magnitudes of output traffic bursts in a streaming media cache~~, comprising:

receiving, at the streaming media cache, a request from a first client system for a stream of media data, the stream of media data including a first streaming media data packet representing a particular portion of the stream of media data;

receiving, at the streaming media cache, a request from a second client system for the stream of media data;

receiving, at the streaming media cache, the first streaming media data packet from an upstream server, the first streaming media data packet including a delivery time at which the first streaming media data packet is scheduled to be delivered to each of the first and second client systems;

pseudo-randomly selecting a first delay value and adding the first delay value to the delivery time of the first streaming media data packet to form a first modified delivery time for the first streaming media data packet;

pseudo-randomly selecting a second delay value and adding the second delay value to the delivery time of the first streaming media data packet to form a second modified delivery time for the first streaming media data packet;

modifying the first streaming media data packet with the first modified delivery time in the streaming media cache to form a first modified first streaming media data packet;

modifying the first streaming media data packet with the second modified delivery time in the streaming media cache to form a second modified first streaming media data packet;

outputting the first modified first streaming media data packet from the streaming media cache to the first client system to cause the first modified first streaming media data packet to be delivered to the first client system at the first modified delivery time; and

outputting the second modified first streaming media data packet from the streaming media cache to the second client system to cause the second modified first streaming media data packet to be delivered to the second client system at the second modified delivery time ~~to reduce magnitudes of output traffic bursts in the streaming media cache.~~

2. (Previously presented) The method of claim 1 wherein pseudo-randomly selecting the first delay value comprises pseudo-randomly selecting the first delay value from within a specified time range.
3. (Previously presented) The method of claim 2 wherein the time range is 0 to approximately 500 milliseconds.
4. (Canceled)
5. (Previously presented) The method of claim 1 further comprising storing a payload portion of the first streaming media in a storage within the streaming media cache.
6. (Previously presented) The method of claim 2 wherein the stream of media data further includes a second streaming media data packet, and wherein the second streaming media data packet includes a delivery time at which the second streaming media data packet is scheduled to be delivered to each of the first and second client systems, the method further comprising:

adding the first delay value to the delivery time of the second streaming media data packet to form a first modified delivery time for the second streaming media data packet;

adding the second delay value to the delivery time of the second streaming media data packet to form a second modified delivery time for the second streaming media data packet;

modifying the second streaming media data packet with the first modified delivery time to form a first modified second streaming media data packet;

modifying the second streaming media data packet with the second modified delivery time to form a second modified second streaming media data packet;

outputting the first modified second streaming media data packet to the first client system at the first modified delivery time; and

outputting the second modified second streaming media data packet to the second client system at the second modified delivery time.

7. (Canceled)

8. (Previously presented) The method of claim 6 further comprising:

receiving a data file from the upstream server, the data file including a payload portion of the first streaming media data packet and a payload portion of the second streaming media data packet; and

storing the data file in a storage within the streaming media cache.

9. (Currently amended) A computer system for providing streaming media data to client systems, ~~with reduced magnitude traffic bursts including a plurality of threads stored in a computer readable medium, wherein the plurality of threads the computer system comprising:~~

a processor;

_____ a network interface, coupled to the processor, through which to communicate data over a network; and

_____ a computer-readable storage medium, coupled to the processor and storing

_____ a first thread configured to configure the processor to receive a request from a first client system and a second client system for a stream of data packets representing particular portions of a media stream, wherein the stream of data packets includes a first data packet, the first thread also configured to pseudo-randomly select a first client delay and to pseudo-randomly select a second client delay;

_____ a second thread coupled to the first thread, the second thread configured to configure the processor to receive the first data packet from an upstream server, wherein the first data packet specifies a first delivery time, the second thread also configured to form a first delayed first data packet from the first data packet based on the first client delay and to form a second delayed first data packet from the first data packet based on the second client delay, wherein the first delayed first data packet specifies a first delayed delivery time and the second delayed first data packet specifies a second delayed delivery time;

_____ a third thread configured to configure the processor to deliver the first delayed first data packet to the first client system to cause the first delayed data packet to be delivered to the first client system at the first delayed delivery time, instead of delivering the first data packet to the first client system at the first delivery time; and

_____ a fourth thread configured to configure the processor to deliver the second delayed first data packet to the second client system to cause the second delayed first data packet to be delivered to the second client system at the second delayed delivery time, instead of delivering the first data packet to the second client system at the first delivery time.

10. (Currently amended) The computer system of claim 9 wherein the second thread is configured to ~~for~~modify the first delayed first data packet based on the first client delay by adding the first client delay to the first delivery time.

11. (Previously presented) The computer system of claim 10 wherein the first client delay is pseudo-randomly selected from the range: 0 to approximately 500 milliseconds.

12. (Previously presented) The computer system of claim 9 wherein the plurality of threads further comprising a fifth thread configured to store payload portions of the first data packet and payload portions of the second data packet in a memory.

13-15.(Canceled)

16. (Currently amended) A method for reducing peak output traffic bursts in a processing system which includes a processor, the method comprising:

receiving, at the processing system, a first packet of data representing a particular portion of a media stream and including a specified packet delivery time, scheduled to be delivered to each of a number of downstream client systems at the specified packet delivery time;

pseudo-randomly selecting a first delay value, by the processor;

modifying the specified packet delivery time of the first packet of data for delivery of the first packet of data to a first downstream client system, by the processor, by adding the first delay value to the specified packet delivery time of the first packet of data;

pseudo-randomly selecting a second delay value, by the processor;; and

modifying the specified packet delivery time of the first packet of data for delivery of the first packet of data to a second downstream client system, by the processor, by adding the second delay value to the specified packet delivery time of second first packet of data.

17. (Previously presented) The method of claim 16 wherein the first packet of data is framed.

18. (Previously presented) The method of claim 16 wherein the first packet of data comprises streaming media data.

19. (Previously presented) The method of claim 16 wherein pseudo-randomly selecting the first delay value comprises pseudo-randomly selecting the first delay value from within a specified time range.

20. (Previously presented) The method of claim 19 further comprising modifying a specified packet delivery time of a second packet of data for delivery of the second packet of data to the first downstream client system, by adding the first delay value to a specified packet delivery time of the second packet of data.

21. (Previously presented) The method of claim 19 wherein pseudo-randomly selecting the second delay value comprises pseudo-randomly selecting the second delay value from within the specified time range.

22. (Previously presented) A method comprising:
receiving at a streaming media cache, from a media server, a data packet representing a particular portion of a media stream and including a specified delivery

time, to be delivered to each of a plurality of client systems at the specified delivery time;

pseudo-randomly selecting a delay time; and

at the streaming media cache, for each of the plurality of client systems, delaying the delivery of the data packet to the corresponding client system by the pseudo-randomly selected delay time, to reduce magnitudes of output traffic bursts from the streaming media cache.

23. (Previously presented) The method of claim 22, wherein the pseudo-randomly selected delay time is within a specified time range.

24. (Previously presented) The method of claim 23, wherein the time range is 0 to approximately 500 milliseconds.

25. (Previously presented) The method of claim 22, wherein a pseudo-randomly selected delay time for a first client system of the plurality of client systems is different from a pseudo-randomly selected delay time for a second client system of the plurality of client systems.

26. (Previously presented) The method of claim 22, wherein said data packet is part of a live data stream being broadcasted to the plurality of client systems.